CLAIMS

1. A method for generating ATM cells for low bit rate applications, said method including a step of scheduling ATM cell transmission times in a way as to keep ATM cell spacing as constant as possible, and a step of multiplexing a plurality of low bit rate connections into a same ATM connection having the thus scheduled ATM cell transmission times.

2. A method according to claim 1, wherein said ATM cell spacing is kept as close as possible to a cell rate negotiated for the corresponding ATM connection.

3. A method according to claim 2, wherein said cell rate is a Peak Cell Rate PCR in the case of service category of DBR, or Deterministic Bit Rate, or CBR, or Constant bit Rate, type.

4. A method according to claim 2, wherein said cell rate is a Block Cell Rate BCR in the case of service category of ABT, or ATM Block Transfer, type.

5. A method according to claim 2, wherein said cell rate is an Allowed Cell Rate ACR in the case of service category of ABR, or Available Bit Rate, type.

6. A method according to claim 2, wherein said cell rate may be re- negotiated.

7. A method according to claim 1, wherein no ATM cell is sent when there is no data available from any of said low bit rate connections, and said method includes a further step of referencing said scheduling step with respect to the next availability of data from at least one of said low bit rate connections.

8. A method according to claim 1, wherein said low bit rate connections are assigned different priorities, and said multiplexing step includes an intra-priority multiplexing for multiplexing low bit rate connections of the same priority, and an inter-priority multiplexing for multiplexing low bit rate connections of different priorities.

9. A method according to claim 8, wherein said intra-priority multiplexing and said inter-priority multiplexing are both carried out at ATM Adaptation Layer level.

10. A method according to claim 8, wherein said intra-priority multiplexing is carried out at ATM Adaptation Layer level, and said inter-priority multiplexing is carried out at ATM layer level.

11. A device for generating ATM cells for low bit rate applications, said device including, for performing a method according to ~~any of claims 1 to 10,~~ means for scheduling ATM cell transmission times in a way as to keep ATM cell spacing as constant as possible, and means for multiplexing a plurality of low
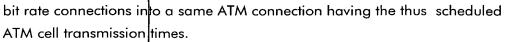
bit rate connections into a same ATM connection having the thus scheduled ATM cell transmission times.

12. A base station for a mobile radiocommunication network, comprising a device according to claim 11 for multiplexing low bit rate traffic from a plurality of sources into a same ATM connection, for transmission to a base station controller.

13. A base station controller for a mobile radiocommunication network, comprising a device according to claim 11 for multiplexing low bit rate traffic from a plurality of sources into a same ATM connection, for transmission to a base station.